

Remarks/Arguments:

Claims 1-3, 5-9, 12, 17, 23 and 31-42 stand rejected.

Claims 20 and 22 have been allowed.

Section 103 Rejections

Claim 1 has been rejected as being obvious in view of Sugiyama. Applicants respectfully submit that this rejection is overcome for the reasons set forth below.

Applicants' invention, as recited in claim 1, includes features which are not anticipated or suggested by the cited reference, namely:

- if the first rule or the second rule is selected by the transmitting-side authenticating means, **the digital AV data encrypted using the transmitted sole single key is transmitted from the transmitting unit to the receiving units.**

Claim 1 explicitly recites that whether the first rule or the second rule is selected, nevertheless, **the digital AV data is encrypted using the transmitted sole single key.** This encrypted digital AV data **is transmitted** from the transmitting unit to the receiving units.

The invention, as recited in claim 1, advantageously, transmits the same digital AV data from the transmitting unit to several receiving units after encryption by the sole single key. The transmitting unit, thus, only has to carry out the encryption once using this sole single key. Consequently, the processing load of the transmitting unit is very light. Moreover, the number of receiving units, which can receive the transmitted data, is not restricted by band width.

Another advantage of the invention, as recited in claim 1, is that the invention may be applied to broadcast type transmissions, where several receiving units connected to a bus may receive the data transmitted from the transmitting unit. The transmitting unit cannot predict timings of data reception by the receiving units in advance. Therefore, the transmitting unit uses the sole single key in the encryption for each of the receiving units.

Sugiyama, on the other hand, is a user authentication system for authenticating the user in a client-server distribution network. This user authentication system authenticates the user as one who is qualified to request service from a server. The server may then provide the service to the authenticated user. Sugiyama does **not** disclose or suggest the features of claim 1, namely, **encrypting the digital AV data using the transmitted sole single key**. Sugiyama does **not** disclose anything on how the digital AV data is encrypted and how the digital AV data is transmitted. This may be seen, for example, in the description provided by Sugiyama at lines 9-12, page 21. As disclosed therein, the authentication of a user corresponding to a security level of each user is performed. Accordingly, Sugiyama does **not** disclose that the digital AV data is encrypted using the sole single key, and then this encrypted digital AV data is transmitted from the transmitting unit to several receiving units.

Applicants respectfully request reconsideration of claim 1.

Although not the same, independent claims 2, 3, 7-9, 17, 23, and 31-33 include features similar to the above described features of claim 1. These claims are, therefore, also not subject to rejection in view of the cited reference for the same reasons set forth for claim 1.

The remaining claims are dependent, respectively, from the above independent claims and, therefore, are not subject to rejection in view of the cited reference for at least the same reasons set forth for claim 1. Reconsideration is respectfully requested.

The Office Action further rejected the claims in view of Al-Tuwaijry. The Office Action states that Al-Tuwaijry discloses a private key system (DES) which is more widely used than a public key system (RSA). The private key system is faster and easier to use but provides low security, and the public key system provides much higher security but is very slow.

Applicants note that Al-Tuwaijry discloses a public key and a private key but does not disclose that the keys (as recited in claim 1) include a first rule configured to use a public key with a secret key, and a second rule configured to use a common key. Furthermore, Al-Tuwaijry only discloses that a public key is more secure than a private

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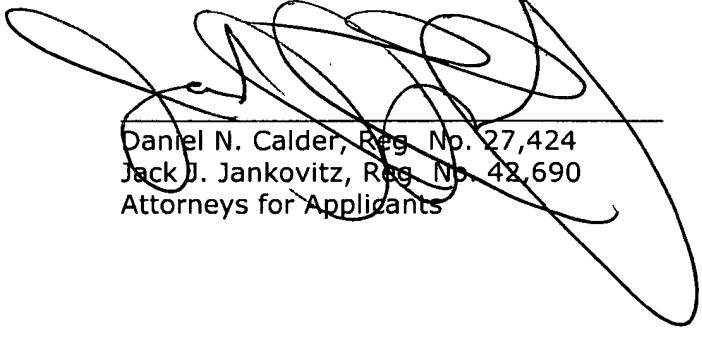
key. The invention as recited in claim 1, however, includes a single system having two levels of encryptions. One system includes a first type of encryption that provides a high level of security and uses a public key and a secret key. The same system also has a second type of encryption that provides a low level of security and uses a common key. Al-Tuwaijry does not disclose such a system.

Furthermore, Al-Tuwaijry does **not** disclose using the public and secret keys, or the common key for transmitting data from a transmitting unit to a plurality of receiving units. Furthermore, Al-Tuwaijry does **not** disclose using a sole single key to encrypt data, and then transmit this encrypted data from the transmitting unit to several receiving units.

Conclusion

Claims 1-3, 5-9, 12, 17, 20, 22, 23 and 31-42 are in condition for allowance.

Respectfully submitted,



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